

## **ENGINEERING CORPORATION**

755 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820

TELEPHONE 603.742.8107 FAGSIMILE 603.742.3830

July 28, 2020

Ms. Marcia Gasses Town of Barrington 333 Calef Highway PO Box 360 Barrington, New Hampshire 03825

Subject:

Barrington Storage-Office

Tax Map 220, Lots 54-7-1 & 54-7-2

Calef Highway

Barrington, New Hampshire

Job No. 19107

## Dear Marcia,

We have reviewed the second peer review completed by Dubois & King dated July 8, 2020. Below please find their comments along with our responses, in blue text.

- 1. Sheet C-3. Drain Pipe Table. The following drainage pipes have discrepancies with the HydroCAD model: Pipe P-4 end invert Repeat Comment. The end invert indicated on the plans and in model do not coincide.
  - Pipe P-4 invert has been corrected on Sheet C-3 to coincide with the Hydorcad model.
- 2. Sheet C-3. Bioretention Plan and Details. The following was noted for the proposed outlet pipe for the outlet structure associated with the bioretention pond:
  - a. The proposed diameter is 12 inches. We recommend that the applicant revise the proposed drainage pipe to have a minimum diameter of 15 inches in accordance with Barrington Site Plan Review Regulations 4.7.7(1). The applicant has revised the pipe diameter to 15 inches in the modeling and the drain pipe table however the Bioretention #1 detail indicates a 12" diameter. We recommend that the applicant revise this detail to indicate 15".

The detail for Bioretention #1 on Sheet C-3 has been revised to indicate a 15" outlet pipe.

3. Drainage Analysis. Pond BIO-1. Outlet Device #2. The number of columns for the horizontal orifice does not match the catch basin frame and grate detail shown on Sheet SP-7 Construction Details. Repeat Comment. It appears that the number of rows and columns should be 4 and 8, not 14 and 4. We recommend that the applicant revise as needed so that the model and the plans coincide.

Detail #6 has been added to Sheet C-3 to clarify that the grate proposed as Outle Device #2 is NEENAH model R-3210-Q which does have a 4x14 configuration.

JUL 28 2020

Ms. Marcia Gasses July 28, 2020 Page 2 of 2

4. Drainage Analysis. The rip-rap apron design calculations included in the analysis were based on a 25-year storm event. The 25-Yr HydroCAD calculations were excluded from the analysis. Therefore, we could not confirm that the correct flow rates were used for the riprap sizing. We recommend that the applicant provide 25-yr HydroCAD calculations to confirm the flow rate used in the riprap sizing.

The attached Drainage Analysis contains the 25 Year Hydrocad calculations for the corresponding riprap calculations.

In addition to addressing these latest comments from Dubois & King this revised plan set also addresses comments raised by the NHDES AoT review of Michael Schlosser, dated July 20, 2020.

## Enclosed please find:

- Two (2) Full Size copies of the revised Plan Set.
- Twelve (12) 11 X 17 copies of the revised Plan Set.
- One (1) copy of the current Drainage Analysis.

Please advise should you have any questions.

Very truly yours

TRITECH ENGINEERING CORP.

Robert J. Stowell, P.E., L.L.S.

RJS / rms

Enclosures \\19107\_D&Kresponse2.docx



JUL 28 2020

LAND USE OFFICE